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THE GENERIC POSITION OF HYPOLAMPSIS PILOSA (ILLIGER) AND SOME RELATED NEW SPECIES (Coleoptera: Halticidae)

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Clark states in the introduction to his Catalogue of Halticidae that the only genus included in the Catalogue that "presented serious difficulties is the genus *Hypolampsis*," and that "it contains within it at least three slightly but distinctly different forms." In a footnote he adds, "*H. pilosa* Ill. also represents another (N.A.) modification of form." At the end of his detailed description of the genus he writes that it is a "very difficult group . . . after many weeks of careful microscopic investigation I have ventured to bring all the species together under a single genus. It will have been obvious from the preceding generic diagnosis that there is very much dissimilarity in general form among the species included. . . I am unable to satisfy my own mind as to the exact limits of any subdivision." However he thought it "better to unite for the present at least all together under one single genus, leaving the task of suggesting subdivisions to future students who shall have the advantage of a larger amount of materials."

Haltica pilosa was described from a specimen collected by Melsheimer in Pennsylvania with Illiger's[1] usual full careful detail so that one can be reasonably certain which of several closely related species he had before him. Olivier[2] a year later described *Altica rugosa* from Carolina from Bosc's collection. With the help of the illustration this species, too, is fairly recognizable, and is probably the same as Illiger's. In 1844 Ziegler[3] described *Oedionychis hispida* from Pennsylvania. His type specimen preserved in the Museum of Comparative Zoology in the LeConte collection matches the description of *Haltica pilosa* Illiger. In 1860, Clark[4] described and assigned to his genus *Hypolampsis* a specimen from Chevrolat's collection from Pennsylvania which was identified, "auct. Chevrolat", as Illiger's species, *H. pilosa*. In 1873 Crotch,[5] comparing Illiger's

[1] Illiger, Mag. f. Insect., 6:105, 1807.
[2] Olivier, Ent., 6:707, 1808.
[3] Ziegler, Proc. Acad. Nat. Sci. Phila. 2: 46, 47, 266, 272, 1844.
[4] Clark, Catalogue of Halticidae, p. 258, 1860.
[5] Crotch, Proc. Acad. Nat. Sci. Phila. 25: 57, 1873.

and Clark's descriptions, decided that Clark's beetle was "evidently very distinct" and named it *Hypolampsis clarkii.*

On the basis of the two descriptions, the differences between Illiger's and Clark's species may be summed up thus: (1) in length, Illiger gives 1¾ lines, Clark, 1 line; (2) in shape, Illiger describes the elytra as elongate, Clark, as broad, globose; (3) in Illiger, between the eyes are two flattish protuberances; in Clark, the space between the eyes is without fovea or depressions; (4) in Illiger, the antennae are yellow brown with black apical joints; in Clark, entirely flavous; (5) in Illiger, the surface of the thorax is uneven; in Clark, "equate."

Therefore it may be deduced that Clark did not have Illiger's species before him when he referred it to the genus *Hypolampsis.* Clark described his beetle as being without any antemedial depression on the elytra and having the elytral punctures entirely concealed by thick flavous pubescence. These last points do not apply to any of the species considered in the present paper. All of them are marked by a distinct depression below the basal callosity near the suture, and in all of them, the elytral striae show distinctly through the pubescence. Going a step farther, one may say that Illiger's species may very well not belong at all to the genus *Hypolampsis* as conceived by Clark, and that none of the species in the closely related group treated in this paper belongs to *Hypolampsis* either. In fact Jacoby has described as *Omotyphus suturalis* a species very near to *pilosa* from western Mexico. What the beetle is that Clark described is not apparent. The description does not fit any North American one known to me. Possibly it is from some other locality.

Even if the species which Clark presumed was correctly identified as *pilosa* were Illiger's species or one closely related to it, I do not believe it is well to keep it in the genus *Hypolampsis.* Of the 36 other species that Clark described and included under this name, 1 comes from Chile, 30 from Brazil, 1 from Surinam, 2 from the Island of St. Paul, and 2 from Bogota. Since Clark, Jacoby has described 1 from Mexico, 1 from the West Indies (assigned to the genus *Hadropoda* by Blake[6]); Crotch has described 1 from Kansas; Weise 1 from Brazil; Kirsch 1 from Ecuador. Since all but three of the species hitherto referred to *Hypolampsis*, one of which is the probably wrongly identified *pilosa*, are South American species, it seems to be best to regard one of the latter as being representative of the genus. Therefore in order to limit the genus which Clark himself has confessed is made up of several "forms," I hereby designate *H. balii* Clark as type of the genus *Hypolampsis.* This is the second one described by Clark under that genus. The first, a large

[6] Blake, Bull. Mus. Comp. Zool., 92 (8):413, 1943.

species from Chile, is not chosen because Clark described it as being somewhat different in characters from the rest. For the North American species which have hitherto gone under the name of *Hypolampsis pilosa* a new generic name is proposed, **Distigmoptera,** from δις two, στίμα a mark, πτερον wing.

Hypolampsis mellyi Cr. is a very rare species of which I have seen only one specimen, the type. It is not closely related to *Distigmoptera.* Probably it is the northern representative of a Central American genus. Until these groups can be studied as a whole, I think it best to leave it in its present genus. The situation is the same in regard to the monotypic genus *Pseudolampsis* Horn, containing only the single species, *guttata*, described by LeConte from Louisiana. It too is extremely rare in collections, and is possibly a subtropical beetle belonging to a group found more commonly in the tropics. Drawings of the two types have been included in this paper in order to enable the student to recognize these two rare beetles. Both these species differ from *Distigmoptera* in lacking the elytral pits and are not very closely related.

The species described in this paper form a closely related natural group, which may be roughly divided into two subgroups according to size, the larger and the smaller species. The small species, of which there are undoubtedly many, are poorly represented in collections, more so than the large ones. I have described one very distinct species from one specimen collected by E. A. Schwarz in Washington, D. C. Of each of the new species described from Costa Rica there is only the type specimen, and the same is true of a well marked species from Arizona. Much more material is needed for study. I believe there are more species represented among the few specimens that I have been able to study, but I am unwilling to describe them on the basis of so few specimens. Nothing whatever is known of their life histories or their host plants.

Description of the Genus Distigmoptera

From 2–5 mm. in length, oblong oval, varying from yellow brown to deep brownish or black, conspicuously pubescent, the hairs often in part erectish; antennae not more than half the length of the body, with the 5 outer joints thickened; head and thorax coarsely punctate, the latter uneven; elytra wider than thorax, coarsely striate-punctate, a depression running obliquely from within the humerus to a more or less pronounced depressed spot on each elytron near the suture before the middle; hind femora thickened, hind claws swollen, anterior coxal cavities closed.

Head moderately elongate, not much produced in front, but usually with distinct frontal tubercles separated by a deep groove, coarsely and densely punctate and pubescent. Antennae usually not extending much below the humeri; joints 3-6 slenderer than the rest, 7-11 thickened, in some species nearly or quite as wide as long. Prothorax quadrate, in most species somewhat wider

than long and a little wider than head, with straight sides and distinct margin, at each corner a seta-bearing nodule, the basal margin rather straight, not sinuate. Disc uneven, in the larger species usually with more or less of an antemedian elevation, in some species like a crown, with a central depression, also depressed on the sides and below the frontal elevations; surface coarsely and densely punctate and usually but not always with erectish hairs. Scutellum triangular and covered with dense appressed pubescence. Elytra much wider than prothorax with well rounded, rather prominent humeri and an intrahumeral depression extending down below the basal callosities, which are well marked in most species, to a distinct depressed spot near the suture, this sutural depression on each elytron present in all the species, particularly marked in the southern, more tropical ones. Punctation in striae varying in coarseness, sometimes the interval between the striae wider than the punctures, in other species the punctures almost square and contingent. The pubescence also variable, usually consisting of shorter and more appressed hairs mingled with less dense and erectish hairs, these latter darker than the grayish or brownish appressed pubescence, in no case entirely concealing the punctation below. Body beneath shining, usually paler or reddish brown with finer, closely appressed hairs, the back of the thickened hind femora with pubescence as dense and coarse as on the elytra; the surface of the prosternum as densely punctate as the disc of the prothorax; the coxae rather widely separate, the anterior ones closed. Legs moderately short and stout; hind tibia with a suggestion of grooving and at the end dilated to form a socket for the tarsus, this socket fringed with tiny comb-like teeth and at the end a short spur; claws in male each with a well developed tooth at base, in female only shortly appendiculate.

Type of genus: *Distigmoptera apicalis*, new species.

Key to the Species

1. Large, 3–5 mm. in length 2
   Smaller, 2–2.8 mm. in length 5
2. Antenna with apical joint or distal joints pale 3
   Antenna with distal joints dark 4
3. Elytra with pronounced intrahumeral depression extending from humeri down below the basal callosities. (Brownsville, Texas) .. *texana* n. sp.
   Elytra with only slight trace of intrahumeral depression. (Ontario to Texas) ..... *apicalis* n. sp.
4. From 3.5–4.7 mm. long (eastern and coastal region from Quebec to Texas) ..... *pilosa* (Illiger)
   From 3.2–3.6 mm. long (Indiana, Iowa, Kansas, Michigan) ..... *mesochorea* n. sp.
5. Five distal joints of antenna wider than long ..... *schwarzi* n. sp.
   Distal joints not wider than long 6
6. Last 2 distal joints paler than preceding ones (Costa Rica) 7
   Last 2 distal joints not paler than preceding 8
7. Elytral hairs long, erectish, with no shorter appressed pubescence; elytral punctation large, contingent near base ..... *capillosa* n. sp.

Elytral hairs short and appressed; elytral punctation not contingent but the punctures well separated ..... *brevihirta* n. sp.

8. Fifth and sixth antennal joints pale, remainder dark. (Mexico) .... *suturalis* (Jacoby)

All the proximal joints pale 9

9. Elytra with a slight transverse ridging behind the basal callosities. (Arizona) ..... *falli* n. sp.

Elytra with no trace of transverse ridging. (Eastern and northern, from New Brunswick to Montana) 10

10. Males either wingless or with wings reduced. (Isle au Haut, Maine, Mass.) ..... *impennata* n. sp.

Wings fully developed in both sexes. (New Brunswick to the Rocky Mountains) ..... *borealis* n. sp.

Distigmoptera pilosa (Illiger)

(Plate 1, Fig. 1.)

Haltica pilosa Illiger, Mag. f. Insect., 6:105, 1807.

From 3.5–4.7 mm. long, deep brownish or blackish with paler legs, densely covered with grayish, brownish, and often along the suture with golden or coppery pubescence; antennae paler brown with the last 4 or 5 joints dark; prothorax uneven with antemedian prominences; each elytron with a depression near the suture before the middle.

Head with interocular space usually a little less than half its width, densely and coarsely punctate, without occipital protuberances, frontal tubercles well marked with a depression between but not much swollen. Antennae extending a little below the humeri, the last 4 or 5 joints darker than the basal ones, apical joint never pale, the last 5 joints much thickened. Prothorax scarcely any wider than long, with straight sides; a seta-bearing nodule at each corner; very densely and often confluently and coarsely punctate; surface uneven, with two moderately developed tubercles before the middle and between and below them a less prominent elevation, producing in the centre a small depression; on the sides smaller ridges; lightly pubescent. Elytra densely pubescent, the pubescence consisting of closely appressed hairs, some coppery or golden, especially along the suture at base, others grayish, forming a wavy pattern more apparent in apical half, and less dense, long, erectish hairs; a slightly marked intrahumeral depression running obliquely to a more marked depressed spot near the suture; at the base near the scutellum a slight tendency to ridging, the striate punctation deep and coarse, especially in basal half, and quite visible through the pubescence. The thickened hind femora on back covered with a pubescence similar to that on the elytra. Anterior legs and undersurface of the hind femora, tibiae and tarsi usually paler.

Type from Pennsylvania, collected by Melsheimer.

Distribution: Quebec (Joliette); Ontario (Blackburn); Massachusetts (Brookline, Dover, Framingham, Wayland); New York (Rockaway Beach); Pennsylvania; Washington, D. C.; Virginia (Barcroft, Falls Church, Ft. Monroe, Virginia Beach);

Kentucky (Louisville); Florida (Crescent City, Dunedin, St. Petersburg); Texas.

Remarks: This is probably the species described by Illiger as *pilosa*. It is also Ziegler's *hispida*, the type of which is in the LeConte collection at Cambridge, a male, badly rubbed but with the distinguishing characters quite plain. There are several species, all very similar although differing in size and other rather inconspicuous details, which have always gone under Illiger's name *pilosa*. The size, 1¾ lines long (2 lines in Ziegler's *hispida*), makes Illiger's species definitely one of the larger species of the group. The color of the antennae, given by Illiger as being with entirely dark apical joints, is the clearest point of his description in differentiating the species. One other large species, having the apical joint of the antenna pale, also occurs in the eastern Atlantic states. This species is noted by Horn as being a brown color form of *pilosa*. In reality it is quite distinct.

Distigmoptera mesochorea, new species

(Plate 1, Fig. 2.)

Between 3.2 and 3.6 mm. long, dark brown or black, the legs and first six antennal joints paler; covered with gray and brownish pubescence, some hairs erectish; coarsely and densely punctate; prothorax uneven with antemedian elevations; on each elytron a depressed spot near the suture before the middle.

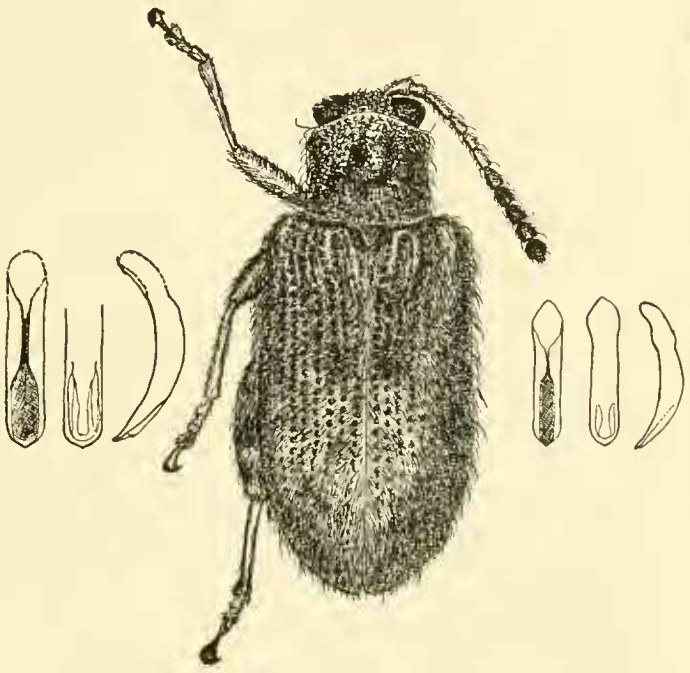
Head with the interocular space half its width; densely and coarsely punctate and pubescent; frontal tubercles separated by a narrow groove. Antennae not extending much below the humeri, the six proximal joints paler than the thickened distal joints. Prothorax a little wider than long, with straight sides, a seta-bearing nodule at each corner; surface densely and coarsely punctate and pubescent; three median elevations in the form of a half crown before the middle. Elytra covered with fine, closely appressed gray and brown pubescence, forming a wavy pattern, and with longer, erectish, dark, not so dense hairs; the coarse striate punctation distinctly visible through the pubescence; a well marked intrahumeral depression curving inwards towards the suture and terminating in a concavity before the middle of the elytra near the suture. Body beneath deep reddish brown or piceous, legs usually paler, shining, covered with light pubescence.

Type male U.S.N.M.Cat. No. 56743.

Type locality.—Iowa City, Iowa, collected June 10, 1917, by L.L.Buchanan.

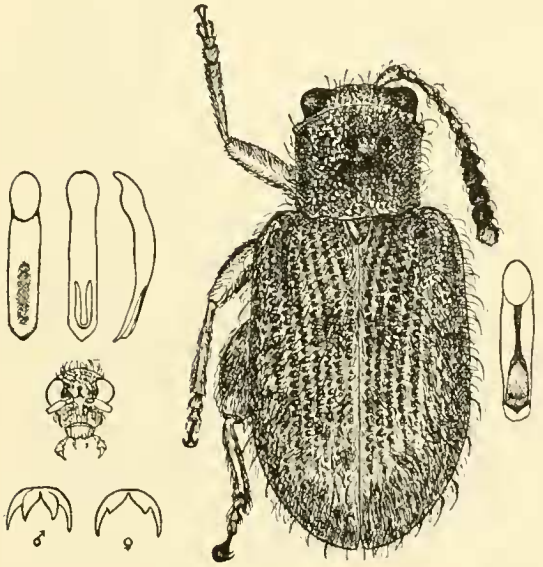
Distribution.—Michigan (Port Huron, Marquette, collected by Hubbard and Schwarz); Kansas (Douglas Co., collected by F. H. Snow, and in Riley Co. by E. A. Popenoe); Missouri (Washington Co.); Indiana (Lake Co., collected by W. S. Blatchley).

Remarks.—In size this species is intermediate between the large and the small ones of the group. It is very close to *pilosa* but differs in being smaller and also slightly in the shape

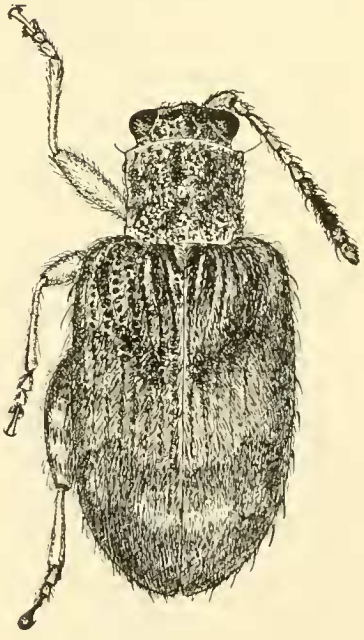


1. Distigmoptera pilosa (Ill.)

2. D. mesochorea



3. D. apicalis



4. D. texana

of the aedeagus. On the lower surface, the opening in the aedeagus is longer in proportion to the entire length. Possibly it is only a variety but among the few specimens examined I have not seen any intergradation between the eastern and western specimens. However it is certainly not so distinctive as the following two species.

Distigmoptera apicalis, new species

(Plate 1, Fig. 3.)

Between 3.5 and 4.5 mm. long, yellowish or deep reddish brown or not infrequently dark brown with paler areas on humeri and along the sides of the elytra; densely covered with brownish, gray, or about the suture, golden pubescence, this pubescence of both closely appressed and longer, erect dark hairs. Antennae with joints 7–10 dark, apical joint pale.

Head with interocular space a little more than half its width, densely and coarsely punctate, a small pit-like depression between the frontal tubercles, lightly pubescent. Antennae not extending much below the humeri, joints 7–10 dark, the apical one usually pale. Prothorax a little wider than long, with straight sides and a seta-bearing nodule at each corner; surface very uneven with a pronounced median depression below the middle and a smaller one before the middle, these two concavities kept from forming a median channel by a semicircular antemedian elevation; surface densely and coarsely punctate and pubescent. Elytra with long incurving intrahumeral depression ending near the suture in a shallow concavity; striation coarse and visible through the dense, closely appressed, yellowish brown or gray pubescence, and the longer and more erect dark hairs. Legs and undersurface shining reddish brown with pale pubescence, the back of the hind femora with a pubescence similar to that on the elytra.

Type male and 4 paratypes, 2 males, 2 females, U.S.N.M. Cat. No. 56744.

Type locality.—Wildwood, N.J., collected June 23, 1935 by L.Bottimer.

Distribution.—Ontario (Pt. Pelee); Massachusetts (Wayland); New Jersey (Seaside Hts., Sea Isle, Wildwood); New York (Rockaway); Maryland (Forest Glen); Washington, D. C.; Virginia (Falls Church, Woodstock); Indiana (Marion Co., Harrison Co. on willow, W.S. Blatchley); Kentucky (Frankfort); Tennessee (Nashville); North Carolina (Southern Pines); Georgia (Peach Co., in a peach orchard); Texas (Denison, Plano).

Remarks.—This is one of the forms mentioned by Horn under *H. pilosa.* It is clearly a distinct species. The width between the eyes is slightly greater than in *pilosa*, the antennae nearly always have pale tips, the thorax has a deep basal median depression, and the elytra are not so convex, with less marked depressions. They also appear more pubescent because of the fuzziness of the dense erectish hairs. The whole beetle is

usually lighter in coloration, being a reddish brown, although some individuals are deeper. The aedeagus is quite different in the shape of the tip and the sculpture of the lower surface.

Distigmoptera texana, new species

(Plate 1, Fig. 4.)

About 4 mm. in length, reddish brown with gray and brown pubescence; antennae with joints 7–9 (sometimes 10) darker; prothorax with antemedian elevations, and the elytra with a marked oblique depression running from within the humerus nearly to the suture before the middle.

Head with interocular space more than half its width, densely and coarsely punctate and with a slight ridge across the vertex and a swelling in the middle of the occiput and a groove between the frontal tubercles; lightly covered with erectish pubescence. Antennae with joints 7–9 and sometimes 10 dark, joints 5, 6, sometimes 10, and 11 pale, basal joints brownish. Prothorax about a fourth wider than long, nearly quadrate with a small seta-bearing nodule at each angle, surface very uneven, with two pronounced antemedian tubercles and a median and lateral depression; lesser knobby prominences on the sides; densely and coarsely punctate and lightly pubescent. Elytra densely pubescent, with both closely appressed and longer erectish hairs, the pubescence varying in color from golden brown especially coppery about the suture, to grayish, and forming a kind of wavy pattern more noticeable on the apical half; yet the deep coarse striate punctation visible through the hairiness. Elytra with a marked oblique sulcus extending from within the humerus nearly half way down the elytra and ending in a deeper depressed spot near the suture. Length 3.8–4 mm., width 1.8–2 mm.

Type male and 3 paratypes (female) U.S.N.M.Cat.No. 56745, 2 paratypes in the Schaeffer collection, in the possession of H. S. Barber (both females).

Type locality.—Esperanza Ranch, Brownsville, Texas, collected by Charles Schaeffer on May 6, also collected there by Wickham.

Remarks.—The bright reddish brown color, varicolored antennae, and unusually deep oblique elytral sulcus distinguish this from the more northern species. The prothorax and elytra are both knobbier than in the other species. The aedeagus resembles somewhat that of the dark species (*pilosa*), but is distinctly different.

Distigmoptera schwarzi, new species

(Plate 2, Fig. 7.)

About 2 mm. in length, oblong oval, shining, deep reddish brown, deeply and coarsely punctate and with yellowish and more or less erect pubescence; antennae pale with 5 distal joints darkened and thickened; prothorax with two antemedian polished elevations.

Head with interocular space half its width; densely punctate and pubescent,

frontal tubercles separated by a median groove extending up the vertex. Antennae not extending much below humeri, joints 3–6 slender, 7–11 twice as thick and darker. Prothorax considerably wider than long, with straight sides, a nodule at each corner; surface uneven, with dense, coarse punctures and two small rounded protuberances quite impunctate and polished a little before the middle; pubescence erectish. Elytra somewhat convex with well marked intrahumeral sulcus and a depression near the suture before the middle; the striate punctation unusually coarse leaving the intervals between very narrow; pubescence pale and erectish. Body beneath shining reddish brown, lightly pubescent; legs somewhat yellowish brown. Length 2.1 mm., width 1 mm.

Type male U.S.N.M.Cat. No. 56746.

Type locality.—Washington, D. C., collected on the 10th of June by E. A. Schwarz.

Remarks.—This is readily distinguished from the other small species of its group by its more rotund, convex shape, its reddish brown coloring and coarser elytral punctation, as well as by the small polished protuberances on the prothorax. The thickened distal joints of the antennae are shorter and broader than in the other species, being broader than long, and the aedeagus is unlike the others. Only one specimen is known.

Distigmoptera impennata, new species

(Plate 2, Fig. 5.)

From 2.1–2.5 mm. long, varying from yellow to dark brown, densely punctate, pubescent; the striate punctures of elytra well separated by distinct intervals; males wingless.

Head with interocular space half its width, shining, lightly pubescent, deeply and coarsely punctate except down the middle, a groove between the frontal tubercles. Antennae extending a little below the humeri, outer joints gradually thickened and a little darker, but neither conspicuously darker nor wider than long as in *schwarzi*. Prothorax about a fourth wider than long with straight sides and a seta-bearing nodule at each corner; surface uneven but without marked elevations; densely and coarsely punctate and pubescent. Elytra in wingless males with poorly developed humeri, the humeri more prominent in winged females in which also the intrahumeral depression is not lacking; in both sexes a distinct depressed spot before the middle near the suture; the rows of striate punctures well separated and in males the punctures in the rows not so dense but more widely spaced, particularly in the 5th and 6th rows.

Type male and 2 paratypes (females), Museum of Comparative Zoology Type No. 26579. 1 paratype, male, in National Museum, U.S.N.M.Cat. No. 56747.

Type locality.—Isle au Haut, Maine, collected in August 1896, (Bowditch collection).

Remarks.—I have chosen this tiny island form with the wingless male to typify the eastern species. The western and more northern species, which seems to occur throughout Canada

from New Brunswick to the Rockies, is far better represented in the collections examined than the eastern and more southern species. In fact I have not seen a good series from any eastern locality, but only a few scattered single specimens for the most part. The series from Isle au Haut of 4 specimens, and 7 specimens from Tyngsboro, Mass., of Blanchard's collecting are the largest series examined. Of the Tyngsboro specimens, at least two, a male and a female, have wings that are reduced, that is extending only three-fourths of the length of the elytra. Two other specimens in other collections, labelled simply Mass., have similarly shortened wings. A small pale male from Boscawen, N. H., a male from Webster, N. H., a male from Paris, Me., a female from Sherborn, Mass., 2 males from Washington, D. C., and a pair from West Virginia have normally developed wings. Whether these are all one species is difficult to determine without more material or biological work. But they do differ from the northern and western specimens without a doubt. In general they are smaller, with less elongate elytra, they are more lightly pubescent, and the elytral punctation is frequently coarser. Unfortunately the aedeagus is not very distinctive.

A female from Columbus, Texas, another from Opelousa, La., and a male from Logansport, La. may represent still another species. These are somewhat more coarsely punctate and less convex, and very hairy.

Distigmoptera borealis, new species
(Plate 2, Fig. 6.)

From 2–3 mm. long, varying from yellow to piceous, prothorax usually darker and humeri paler; elytra shining beneath the sparse, partly erect pubescence. Antennae with the thickened distal joints darker.

Head densely and coarsely punctate and lightly pubescent except in the middle of the lower front, there polished, a groove separating the frontal tubercles. Interocular space about half the width of the head. Antennae extending a little below the humeri, the five distal joints gradually thickening and frequently, but not always, darker. Prothorax about a fourth wider than long, densely and coarsely punctate with erectish pubescence; surface a little uneven with a median channel and often slight elevations on either side of it anteriorly. Elytra elongate, covered with light pubescence, both appressed and semierect, but not so thick as to obscure the striate punctures, punctures varying in size but generally not so coarse as in *impennata*, and with the intervals between as wide or wider than the punctures; humeri well rounded, an intrahumeral depression extending obliquely across the elytra to the depression near the suture before the middle; color varying from yellowish to deep brown, the humeri usually paler.

Type male and 8 paratypes (1 male, 7 females), U.S.N.M.Cat. No. 56748.

Type locality.—Swift Current, Saskatchewan, collected Sept. 1882, C. V. Riley collection.

Distribution.—New Brunswick (Treadie); Hudson's Bay; Quebec (Duparquet); Ontario (Arnprior, Pt. Pelee); Manitoba (Brandon, Stony Mt.); Saskatchewan (Saskatoon); Alberta (Edmonton, Leduc); Montana (Assiniboine); Colorado (Pago Spgs.); Kansas (Reno Co.); Oklahoma (South McAlester); Iowa (Iowa City); Illinois (Champaign); Michigan (Higgins Lake, Houghton Co., Lawton, Marquette).

Remarks.—This species is fairly abundantly represented in collections. No hint is given of what its food plant may be. Apparently it occurs in sandy soil, often near water. Mr. Gentner has taken a large series of it that he collected alive on the surface of Higgins Lake. In general, it is more elongate than the eastern and more southern species, *D. impennata.*

Distigmoptera falli, new species

(Plate 2, Fig. 10.)

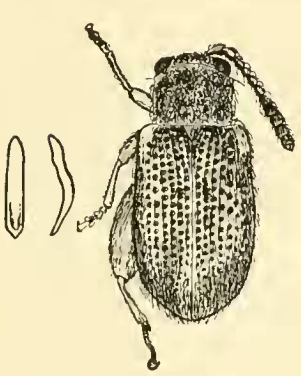
Nearly 3 mm. in length, oblong, deep yellow brown with darker head and paler humeri, the last 5 antennal joints dark and thickened; coarsely punctate and covered with pale, partly erectish pubescence.

Head with interocular space about half its width, coarsely punctate except for the tubercles and a median space in the lower front; a deep groove between the tubercles; lightly pubescent. Antennae extending well below humeri; 6 proximal joints yellow brown, distal 5 much darker and enlarged. Prothorax about a third wider than long with straight sides, a seta-bearing nodule at each corner; densely and coarsely punctate; a well marked depression below the middle; deep brownish with somewhat paler margins; lightly pubescent. Scutellum narrowly shield shaped, dark, pubescent. Elytra with striate punctures nearly as wide as intervals at base, becoming finer towards apex; basal callosities near scutellum not very much developed; a transverse ridging above the two elytral depressions and a slight depression towards the apex of each elytron at the curve; surface shining deep yellowish brown, with paler humeri, covered with light pubescence, partly appressed, with longer erectish hairs; undersurface shining yellowish brown, pubescent. Length 2.8 mm., width 1.5 mm.

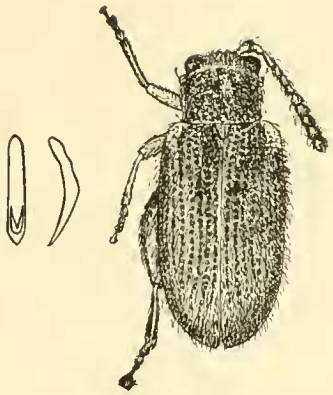
Type male in the Museum of Comparative Zoology, in Fall's collection. M.C.Z. Type No. 26580.

Type locality.—Globe, Arizona.

Remarks.—In size this resembles the Costa Rican species, being a little larger than the small species of the group from the United States. Unfortunately the drawing was made with a borrowed microscope and is on a slightly smaller scale than the rest of the drawings. Two distinctive characters are the more marked thoracic depression and the peculiar transverse ridging above the elytral depressions. The antennae, which are fairly long, have much enlarged distal joints.

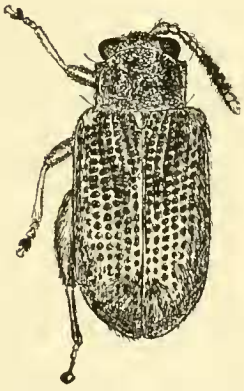


5. D. impennata

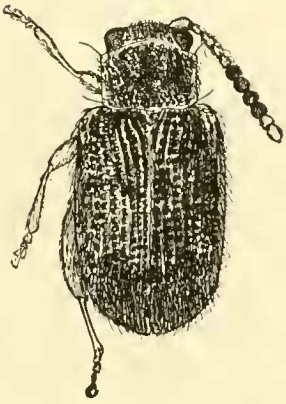


6 D. borealis

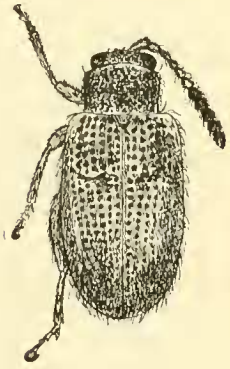
7 D. schwarzi



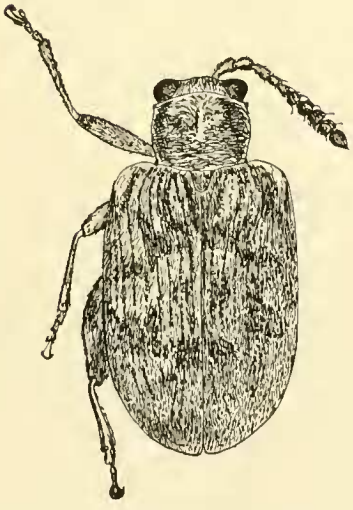
8. D. brevihirta



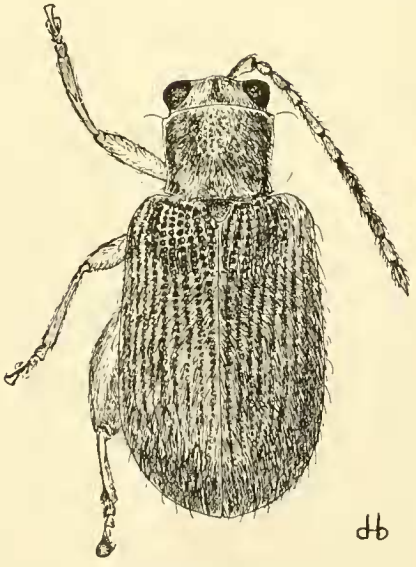
9. D. capillosa



10. D. falli



11. Pseudolampsis guttata (Lec)



12. Hypolampsis mellyi Cr.

Distigmoptera capillosa, new species

(Plate 2, Fig. 9.)

About 2.5 mm. long, deep reddish brown, shading into piceous, with paler legs and abdomen, and with the proximal five and distal two antennal joints pale; densely and coarsely punctate; elytra with striate punctures without intervals; covered with ashy brown, erectish pubescence; prothorax with an elevated crown in the middle anteriorly; elytra with pronounced basal callosities.

Head coarsely and rugosely punctate, a small carina between antennal bases and a vertical depression above; tubercles not distinguishable; pubescent; interocular space more than half width of the head. Antennae extending below the humeri; joints 6–11 enlarged, and except the 2 distal joints dark. Prothorax a little wider than long, with straight sides; surface very densely and coarsely punctate and with a raised crown in the middle anteriorly; pubescence long and erectish. Scutellum narrowly triangular. Elytra broad with rounded humeri, a deep incurving intrahumeral depression ending in a deep concavity below the well developed basal callosity; striate punctures coarse and deep without interstitial intervals; shining reddish brown shading into piceous areas; covered with a fine, semierect cinereous pubescence. Body beneath shining chestnut brown; with paler abdomen and legs; lightly pubescent. Length 2.4 mm.; width 1.2 mm.

Type female U.S.N.M. Cat. No. 56749.

Type locality.—San Pedro de Montes de Oca, Costa Rica, collected Jan. 31, 1936 by C. H. Ballou.

Remarks.—This species differs from the other Costa Rican one by its longer antennae, more coarsely punctate surface and by the erectish pubescence. It differs from all the other small species by having more pronounced thoracic and elytral prominences, and by being entirely without the shorter appressed pubescence.

Distigmoptera brevihirta, new species

(Plate 2, Fig. 8.)

2.3 mm. in length, piceous with paler tibiae and tarsi and antennae, joints 6–9 dark; head and prothorax densely punctate, elytra coarsely striate-punctate; lightly covered with golden appressed pubescence; prothorax with a slightly raised half crown in middle anteriorly, elytra with an intrahumeral depression.

Head lightly pubescent, piceous, somewhat shining, densely and coarsely punctate throughout; the frontal tubercles slightly distinct with a short groove between; interocular space about half the width of the head. Antennae not extending much below the humeri; first five and last two joints pale, the six distal joints thickened. Prothorax about a third wider than long with straight sides, a seta-bearing nodule at each corner, surface densely and coarsely punctate, depressed at the sides, a crownlike elevation in anterior half; lightly pubescent. Elytra with prominent basal callosities and a deep sulcus running from within the humeri to the depressed spot near the suture; punctation of the elytral striae coarse and in basal portion very close; pubescence light, golden,

and closely appressed. Body beneath shining piceous, tip of abdomen, coxae, tibiae and tarsi paler; finely pubescent. Length 2.3 mm.; width 1 mm.

Type female, U.S.N.M. Cat. No. 56750.

Type locality.—San Francisco, Costa Rica, collected Feb. 8, 1940.

Remarks.—This distinctive species is outstanding because unlike any of the other small species it has closely appressed pubescence, with no long semi-erect hairs. It has less developed thoracic and elytral prominences than the other Costa Rican species.

Distigmoptera suturalis (Jacoby)

Omotyphus suturalis Jacoby, Biol. Cent. Amer., Coleopt., 6 (1) Supplement; 322, 1892.

"Black, sparingly pubescent, the 5th and 6th joints of antennae and the base of the tibiae flavous; head and thorax strongly rugose-punctate, the thorax with two small elevations; elytra with a deep depression near the middle; strongly punctate-striate, the suture narrowly fulvous-pubescent. Length 1¼ line ..... Mexico, Chilpancingo in Guerrero, collected by H. H. Smith. A single specimen."

Jacoby's description together with the illustration definitely places this species in the genus *Distigmoptera*. It is about the same size as the Costa Rican species but differs in having sparse pubescence and also in the coloration of the antennae.

A NEW GENUS AND SPECIES OF HOPLOTHRIPINI (Thysanoptera; Phlaeothripidae)

By J. C. Crawford

Bureau of Entomology and Plant Quarantine, United States Department of Agriculture

The new species described herein appears so unrelated to any known North American form and exhibits such unique peculiarities that a new generic name is proposed for it.

Zaxenothrips, new genus

(Plate 20)

Belongs to the Hoplothripini; head much broader (1.43) than long in female, less so (1.2) in smaller (positively) heterogonic male, only slightly broader than long in larger (positively) heterogonic male, widest at middle (or back of it in larger (positively) heterogonic male, shorter than prothorax, produced in front of eyes, elevated dorsally, declivous in front and with the widely separated antennae in-